

TECHNICAL DATA

RECYCLED POLYETHYLENE PROFILES

Recycled polyethylene is produced with the use of urban, industrial and domestic waste, generating one of the most ecological and resistant options within the range of plastics.

ADVANTAGES RECYCLED POLYETHYLENE PROFILES

- 100% recycled material from urban, industrial and domestic waste.
- Economical compared to recycled polycarbonate.
- Resistant, non-deformable, easy to handle.
- Sterile, hygienic, easy to clean, antigrffiti and antivandalism
- Flexible.
- Innocuous to environmental degradation.
- Solid.
- Good thermal and acoustic insulation.
- Waterproof with good resistance to water and microorganisms.
- Ecological and non-polluting product, resistant to the action of animals or insects.
- Lower production cost.
- Minimum maintenance, neither shatterproof nor inoxidizable.
- Excellent resistance to chemicals, acids, oils and hydrocarbons.

TYPES AND FORMATS

Available in different formats of profiles, round, squared and with different colors.

APPLICATION AREAS

- Public furniture for outdoor use.
- Vertical and horizontal supports.
- Facades.
- Lattices.
- Pergolas.
- Floors
- Terrace and garden furniture.
- Walkways, bridges and other structural works.
- Pool perimeter.
- Ceilings.
- Piers.
- Garden fences.
- Animal fences.

TECHNICAL SPECIFICATIONS – RECYCLED POLYETHYLENE PROFILES

Properties	Value	Units	Standard
Physical properties			
Density	0,89 - 0,97	g/cm ³	ASTM D 6111
Water absorption 24 hours	0,23 - 0,54	%	ASTM D 570
Water absorption 9 weeks	1,91 - 4,09	%	ASTM D 570
Mechanical properties			
Flexural strength	798-1002	MPa	ASTM D 6109
Compression strength	10,3-12,2	MPa	ASTM D 6108
Compression module	376 - 531	MPa	ASTM D 6108
Cut resistance	5,40 – 6,58	MPa	ASTM D 143
Cloves extraction	0,56 - 0,71	kN	ASTM D 6117
Screw extraction	1,70 - 2,53	kN	ASTM D 6117
Thermal properties			
Linear thermal expansion coefficient	4,8-35,2	(μ /m°C)	ASTM D 6341
Thermal deflection temperature	4,5-57,2	(°C) (1,8MPa)	ASTM D 648
VICAT softening temperature	88,1-122,8	(°C) (50° C/h-1)	ASTM D 1525
Fire properties			
Smoke density	8-29	VOF4	NF X 10-702
Smoke density	325 - 844	Dm	NF X 16-101
Flame propagation speed	21	(mm.min-1)	NF P 92-506

The properties described here are typical values of the material. Polimer Tecnic is not responsible for the materials of a specific consignment to exactly match the given values, being able to carry out tests of that heading. The above information is based on our experience and is given in good faith. Due to some installation and processing factors that are beyond our knowledge and control, no guarantee is given regarding such information.